

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars.

1. In the claims

The independent claims 18, 29 and 30 are currently amended to recite that the coating “consists of a composition containing only an acrylate binder and lacking a filler substance.” Support for this amendment is found in the claims as previously filed and in the specification, for example, on page 1, last paragraph, and page 2, 3<sup>rd</sup> and 4<sup>th</sup> full paragraphs.

This amendment is provided in part to draw the distinction that the binder is an acrylate, which in turn, is a homopolymer (a polymer containing only acrylic moieties). It is submitted that the originally-filed disclosure provides ample support for this amendment. The comparison of the binder being an “acrylate” or alternatively a “mixture of polymers or copolymers having a high acrylate content” supports the amendment to these claims. Furthermore, this amendment draws the distinction that the binders according to the pending application are different from systems containing “copolymers having a high acrylate content.” It follows from this amendment and the support in the specification that the acrylate binders falling within the scope of the pending claims can only be homopolymers.

It is noted that the recitation “an acrylate system as the sole binder” in previously presented claims and the current recitation of “composition containing only an acrylate binder” are intended to convey essentially the same limitation of the claims.

The amendments to these claims have been submitted to improve the clarity of the subject matter for which protection is sought. The amendments were not made to avoid prior art, as it is believed that the original claims are fully patentable over the cited prior art. Rather, in reviewing the claim language it was perceived that some of

the language could be improved to more clearly define the inventive subject matter. It is to be noted that the examiner did not raise any objections with regard to the language of the original claims under 35 U.S.C. § 112 or any other part of the patent laws and regulations.

It is submitted that the amendment to claims 18, 29 and 30 essentially make explicit that which was implicit in the previous amendment of the claims.

It will be pointed out that the subject matter recited in the pending claims parallels the allowed language in European patent no. 1099024 B1, which corresponds to the pending application.

In view of the amendment to claim 18, claim 46 is canceled without prejudice or disclaimer.

Entry of the claims and acknowledgment of the same is respectfully requested in the next office communication.

2. Rejection of claims 18, 19, 21-23, 25, 27-29 and 46 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 5,380,695 (*Chiang*) in view of U.S. patent 6,107,418 (*Mueller*)

This rejection is respectfully traversed on the basis that the combination of *Chiang* and *Mueller* does not render the rejected claims *prima facie* obvious.

A full treatment on the shortcomings of *Chiang* is provided in the reply that was filed on April 25, 2005. Despite the new rejection of these claims in view of *Chiang*, it is submitted that the prior observations of *Chiang* still stand, and it will be shown that the comments in the action regarding *Chiang* in the “response to arguments” are untenable.

*Mueller* is now provided in the rejection to overcome the shortcomings of *Chiang*, namely the teaching of providing a dirt repellent protective coating. Curiously, the rejection does not explain how this coating would be used in conjunction with the coating of *Chiang* which, according to the rejection, presumably

already coats the security card thereof. Despite this hurdle, it is nonetheless submitted that one skilled in the art would still be motivated by the teachings of *Mueller* to make up for the shortcomings of *Chiang* even if the coating composition of *Mueller* were used to coat the security card of *Chiang*.

*Mueller* discloses a dirt-repellent and mar-resistant coating which is provided for coating articles of various uses, such as in films, metal parts, conveyor belts, tents and etc. (col. 6, lines 18, 19; col. 5, line 57 to col. 6, line 25). Paper is mentioned as one of the articles that can be coated by the coating of *Mueller*.

Turning to the coating composition, there is no disclosure or suggestion in *Mueller* of a coating composition consisting only an acrylate binder and lacking a filler substance. The binder of the coating is expressly described as a polymer containing silanes and siloxanes (constituents (1) and (2) in col. 4, line 61 through col. 5, line 32). Acrylate moieties are described as being optional components (B), (G) and (J). However, there is nothing that would tend to indicate to a skilled artisan that the coating composition of *Mueller* contains only an acrylate binder.

Thus, it is readily apparent that *Mueller* does not teach the specific dirt repellent coating required by the pending independent claims.

In observing the rejection of the claims, the rejection contemplates that it would have been obvious to employ the dirt-repellent protective layer of *Mueller* on the paper substrate of *Chiang* on the basis of the following premises:

- (1) *Chiang* discloses an ID card having a paper or plastic substrate;
- (2) *Chiang* teaches that the substrate is a security later (layer 14) that includes an acrylate material;
- (3) *Chiang* teaches that the security layer is a protecting layer;
- (4) *Chiang* does not disclose that the coating of the security layer is dirt-repellent, so

(5) *Mueller* is provided which teaches a paper with a dirt-repellent protective coating disposed on the surface of the paper layer.

It is submitted that, in view of the prior remarks on *Chiang*, premise (3) is incorrect. The layer 14 of *Chiang* is not a security layer. Instead, it is clearly an adhesive layer.

Upon considering this rejection, irrespective of what is taught by *Mueller*, one skilled in the art would not be motivated by the teaching of the adhesive layer of *Chiang* as the surface coating of the pending claims. It is a basic requirement for the coating of the pending claims to be provided on a surface. The reason is simple: the coating is intended to repel dirt that comes into contact with the surface.

The adhesive layer of *Chiang*, which is repeatedly referred to in the rejection as a surface coating, is described as being as an intermediate layer. As indicated in the reply of April 25, 2005, the adhesive layer of *Chiang* is provided between a support sheet 12 and an image receiving layer 16 of the ID card, adhering strongly to both (see *Chiang* in col. 5, lines 3-17). The features and location of the adhesive layer are abundantly apparent in view of Figs. 1 and 2 of *Chiang*.

One skilled in the art would readily not perceive the adhesive layer of *Chiang* as a security layer.

Applicants respectfully disagree with the assertion in the “response to arguments” in section (7) of the action which alleges that “an adhesive layer functions as a protective layer as it keeps dirt and other environmental objects off the surface it is covering.” Apparently, the term “repellent” is not given any weight in the rejection since not only do the claims require that the coating “protect” the paper layer, but that the coating must ward off or drive away dirt, or otherwise repel dirt. As is well understood, every claim limitation must be considered when determining obviousness.

According to the logic of the statement in section (7) of the action, the glue coating on a flypaper is a dirt-repellent surface coating. Flies stick to the glue but the glue layer keeps objects off of the paper on which the coating is provided. Of course, one skilled in the art would readily recognize that the flies aren't repelled from flypaper, and would realize the distinct differences. The pending claims not only recite that the coating protects the paper, but require that the coating have properties which "repel" dirt from the paper. The repelling feature of the coating is provided by the specific composition required by the pending claims.

In view of these observations, one skilled in the art would not confuse the adhesive layer of *Chiang* as a surface coating since it is intermediate and is an adhesive coating. How one skilled in the art would therefore be motivated to replace the adhesive layer of *Chiang* with the coating of *Mueller* is anyone's guess. The proposed combination of *Chiang* and *Mueller* does not work and makes no sense.

Returning to the premises for the rejection, it is submitted that premise (5) is incorrect. *Mueller* does not disclose or suggest a surface coating having a composition required by the pending claims, and one skilled in the art would not have a reasonable expectation of successfully making the security paper, document of value and method according to the claims with the combined teachings of *Chiang* and *Mueller*.

Assuming that the layer 14 of *Chiang* were replaced with the coating of *Mueller*, the coating of *Mueller* would fail to adhere the sheet 12 and layer 16 of *Chiang* to one another, as required by the teachings of *Chiang*. The coating of *Mueller* is dirt repellent. This proposed combination teaches away from the intent of *Chiang* since the sheet 12 and layer 16 would fail to be connected to one another with the protective coating of *Mueller*. Therefore, one skilled in the art would not realize from *Chiang* and *Mueller* a paper layer with the dirt repellent surface coating according to the pending claims.

In view of these observations, it is respectfully submitted that the proposed combination of *Chiang* and *Mueller* does not render the pending claims *prima facie* obvious since these patents fail to teach every limitation required by the pending claims, there is no suggestion or motivation to combine these patents, and, even if combined, the proposed combination would not work.

Therefore, withdrawal of this rejection is respectfully requested.

3. Rejection of claim 26 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 5,380,695 (*Chiang*) in view of U.S. patent 6,107,418 (*Mueller*) further in view of U.S. patent 5,525,400 (*Manser*)

This rejection is respectfully traversed in view of the observations in section (2) touching on the failure of the combination of *Chiang* and *Mueller* to amount to a case of *prima facie* obvious. *Manser* fails to make up for the shortcomings of *Chiang* and *Mueller* in teaching the features required by pending claim 18 from which claim 26 depends. Therefore, withdrawal of this rejection is respectfully requested.

4. Rejection of claim 24 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 5,380,695 (*Chiang*) in view of U.S. patent 6,107,418 (*Mueller*) further in view of U.S. patent 4,856,857 (*Takeuchi*)

This rejection is respectfully traversed in view of the observations in section (2) touching on the failure of the combination of *Chiang* and *Mueller* to amount to a case of *prima facie* obvious. *Takeuchi* fails to make up for the shortcomings of *Chiang* and *Mueller* in teaching the features required by pending claim 18 from which claim 24 depends. Therefore, withdrawal of this rejection is respectfully requested.

5. Rejection of claims 29-34 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 5,817,205 (*Kaule*) in view of U.S. patent 5,380,695 (*Chiang*)

This rejection is respectfully traversed on the basis that the combination of *Kaule* and *Chiang* does not render the rejected claims *prima facie* obvious.

A full treatment on the shortcomings of the combination of *Kaule* and *Chiang* is provided in the reply that was filed on September 21, 2004 and April 25, 2005. Despite the maintenance of this rejection, it is submitted that the applicants' prior observations on the shortcomings of *Kaule* and *Chiang* still stand. Moreover, the rationale for maintaining this rejection in the outstanding action is respectfully traversed on the basis that *Kaule* and *Chiang* fail to teach every limitation required by the claims, there is no suggestion that would motivate one skilled in the art to combine these references, and the proposed combination would not reasonably successfully result in the devising the document of value and method of claims 29-34.

The line of argumentation for rejecting these claims is based on the following premises:

- (1) *Kaule* teaches making a security paper;
- (2) *Kaule* teaches a coated security paper;
- (3) *Kaule* teaches a coating that lacks polyurethane and filler substance;
- (4) it is obvious that the coating of *Kaule* repels dirt because the respective coating is provided with lacquers and printed protective layers;
- (5) *Chiang* discloses an ID card with a paper support having a security layer comprising an acrylate material; and
- (6) it would have been obvious to include acrylates of *Chiang* in the security document of *Kaule* "because the acrylate material improves the binding properties of the coating layer."

It is respectfully submitted that premises (3), (4) and (6) are incorrect.

In turning to premise (3), it will first be pointed out that the claims were amended back on September 21, 2004 to no longer recite language that indicates that the coating lacks a polyurethane. Next, it was pointed out in the remarks

accompanying the prior amendment that the coating of *Kaule* includes binders and filler substances.

It was requested in the prior remarks that there be some showing of evidence which teach one skilled in the art from *Kaule* that the coating is to lack a filler substance. The action in section (7), last paragraph, alleges that *Kaule* does not teach the use of a filler substance yet fails to provide any identifiable passage in *Kaule* to support this allegation. There is actually is no evidence in *Kaule* to support this premise. Instead, *Kaule* clearly teaches the use of a filler substance by way of disclosing the composition as including mineral pigments (col. 5, lines 8-12).

Therefore, *Kaule* does not and cannot teach a surface coating that is dirt repellent and has a composition that includes only an acrylate binder and lacks a filler.

Next, in observing premise (4), there is no indication that the description of *Kaule*, which would tend to suggest to one skilled in the art that because a coating is provided with lacquers and printed protective layers, would teach to one skilled in the art that the coating would necessarily would repel dirt. This assertion in the action appears to find no support in *Kaule*. *Chiang* likewise fails to make any reference to a dirt repellent coating, as expressly acknowledged in the action in section 3.

Such evidence to support premise (4) must be provided in order to justify rendering the above-identified claims obvious in view of *Kaule*. It is well understood that a prior art reference must disclose or suggest a negative limitation in order to qualify as evidence of a teaching that would motivate a skilled artisan to make the claimed composition. In the absence of a specific teaching as to a surface coating consisting a composition containing only an acrylate binder and lacking a filler substance, the applicants submit that *Kaule* does not render the coating of the present application obvious.

Lastly, and in reference to the aforementioned remarks in section 2, it is submitted that the alleged security layer of *Chiang*, as represented by adhesive layer, is not a protective dirt repellent coating. The adhesive layer of *Chiang* clearly would



point to one skilled in the art the notion to provide a layer which is provided for securing three layers to one another. Despite the idea that the adhesive layer of *Chiang* includes acrylates, it is not a dirt repellent coating since it is an adhesive.

One skilled in the art would not be motivated by the combination of *Kaule* and *Chiang* to combine the adhesive layer of *Chiang* with the coating of *Kaule* since there is no suggestion in *Chiang* to provide the adhesive layer as nothing more than an intermediate adhesive layer. *Kaule* also makes no inference to including an adhesive on the coating, and logically so; why would one want an adhesive in a surface coating if the coating is intended to repel dirt. The proposed combination would amount to nothing more than the flypaper of type described above.

Even if one were to use acrylates as a binder in the coating layer of *Kaule*, and even if one would use acrylates as a sole binder, despite the lack of any such teaching in either *Chiang* or *Kaule*, one would arrive at a coating containing mineral pigments which serve as a filler. This of course would not result in a dirt-repellent coating lacking a filler substance, and therefore would not amount to the surface coating of the pending claims.

In view of these observations, it is kindly asserted that the proposed combination of *Kaule* and *Chiang* fails to teach every limitation required by the claims, there is no motivation to combine *Kaule* and *Chiang*, and there would be no reasonable expectation for success in combining these patents at making the document of value and method of the rejected claims.

Accordingly, withdrawal of this rejection is respectfully requested.

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6. Conclusion

As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicants' attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin J. Cassell", written over a horizontal line.

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